

## REMARKS

### The Amendments

Claims 36, 48, 52, 56, and 57 are amended. No new matter is added by the amendments to those claims. Claims 36, 37, 39-42, 44, 46-53, and 55-62 are pending in this application.

### The Rejections

#### 35 USC 103(a): Claims 36, 37, 39, 40, 42, 44, 46-53, 55-58, and 62

The examiner rejected Claims 36, 37, 39, 40, 42, 44, 46-53, 55-58, and 62 under 35 USC 103(a) as being unpatentable over US 2002/0162477 (Palumbo) in combination with US 5,224,425 (Remington) and US 4,172,486 (Tarassoff). In making the rejection the examiner explained that all of the features of the Applicants' claimed amusement ride and method are described in the cited documents. The examiner concluded that it would have been obvious to combine those features because all of the documents describe devices that are used in passenger carrier systems for amusement rides.

Claims 36, 48, 52, 56, and 57 have been amended to explicitly clarify that the loop cable is adapted for a dual function. Claim 36, for example, characterizes the loop cable as **“configured and operating in use as both a ride cable upon which a passenger carrier free-rolls under gravity and as a retrieval means for returning the passenger carrier to an end station after a ride via rotation of the loop cable”**. Claim 36 as now presented explicitly clarifies that the single loop cable operates and provides an integrated solution as both a ride cable and as a retrieval means. No other separate retrieval cable or means associated with the amusement ride system is required, unlike the systems taught in the prior art.

None of the prior art documents alone or in combination teach, disclose or suggest the Applicant's claimed amusement ride assembly as now set forth in Claim 36 which includes a **single loop cable** for providing a free roll gravity ride and wherein the cable operates as both the ride cable for the free-rolling passenger carrier, and also operates as a retrieval means for returning the passenger carrier to an end station via rotation of the loop cable. The other

independent claims, Claims 48, 56, and 57 have also been amended to explicitly include those features of configuration, operation and purpose of the single rotatable endless loop cable in the amusement ride system.

The primary references, Palumbo and Remington, cited by the examiner describe rides having **multiple cable systems** for transporting passengers or providing adrenaline rides. Neither of those documents teach, suggest or disclose the use of a single rotatable loop cable as both the ride cable and the carrier retrieval means. By their nature, the systems described in the primary references, fail to suggest the Applicant's claimed amusement ride assembly because both of those references require separate cables for each function: one on which the passenger carrier free-rolls and a second that is attached to the passenger carrier for returning to the starting station for the next ride.

Further, the citations relied upon by the examiner do not even describe what the examiner asserts in the official action. Whether considered alone or in combination, the cited references additionally fail to teach the applicant's invention. The deficiencies of the main references are described in greater detail below.

### **Palumbo**

On page 3 of the official action, the examiner states, "Palumbo's ride assembly includes a rotatable endless loop cable (construed as cable (30SCD) and cable (28SCT)) spanning with a catenary ...". The examiner further states, "Palumbo's ride also includes a passenger carrier (12TS) to free roll along the loop cable (along cable (28), i.e. part of the loop cable as discussed above)." The second assertion is clearly erroneous.

Referring to Figures 2 and 5 in Palumbo, the passenger carrier 12TS is configured to free roll down dual parallel tram cables 28SCT as described in paragraph 0054 of Palumbo. The tram cables 28SCT are individual cables running in parallel and are each attached at their respective

ends to the low pole 70SPL and to the high pole 82SPH (see Figure 5 in particular). The tram cables upon which the passenger carrier 12TS rides are not a loop cable, as set forth in Claim 36 for the Applicant's claimed amusement ride assembly.

The only loop cable disclosed in Palumbo is the drive cable 30SCD. As discussed in paragraphs 0056, 0059, 0091, and 0092, the drive cable 30SCD is provided with a drive cable interface 32TR that connects to the tram housing 23TT via a hook 39TR. Drive cable 30SCD is used to haul the passenger carrier 12TS (riding upon the tram cables 28SCT) back to the top of the ride.

The Palumbo system is a **multi-cable system** where a separate drive cable is used as the means to return the tram apparatus to the top of a ride for release for a free roll ride down the dual, separate, parallel tram cables (ride cables). There is no disclosure, teaching or suggestion for using drive cable 30SCD as the ride cable. Palumbo specifically requires dual tram cables for the ride and a separate drive loop cable used as the retrieval means.

### **Remington**

The examiner states the following relative to Remington.

Remington teaches a car assembly (63) having a passenger seat (54) (i.e. a passenger carrier) to be free rolled upon a **loop cable** (1) in Figures 3-4 as well as column 5, line, 50 to column 7, line 16, and column 3, lines 60-61 (wherein the carrier passenger being free-rolled upon a cable loop (1)).

That assertion is also clearly erroneous. As shown in Figures 2 and 3 of Remington, cable (1) on which the passenger and car (30, 17) ride is a single **non-loop cable** having one end attached at top cable support (5) and the other end attached at bottom cable support (6). Remington describes a separate loop cable that is used to return the passenger car to the starting point of the ride. More specifically, the only loop cables disclosed in Remington are a separate conventional winch powered car return device (4) for the carrier and a conventional chairlift for the riders as shown in Figures 1 and 3. In operation, the passenger disembarks the passenger carrier car at the

end of the ride down the single ride cable (1) and then mounts the car onto the winch return cable device (4) in Figure 3 and as referred to in column 5, lines 66-68. The conventional chairlift as shown in Figure 1 is used to transport the passenger (16) back to the top of the ride.

It should now be clear that Remington describes a **multi-cable** system requiring a ride cable (1) upon which the passenger carrier free rolls down. The passenger must disembark at the end of the free-roll ride, remove the passenger carrier from the ride cable (1), and then have the carrier winched back up by first loop cable (4). Then the rider may transport himself or herself back up to the top of the ride using the separate chairlift (2) which is described at column 6, lines 52-62.

It should now be clear that Palumbo neither describes nor suggests the Applicant's invention because Palumbo requires the use of a cable for retrieval of the passenger car that is separate from the ride cable itself. Palumbo does not teach, suggest or disclose the Applicant's novel arrangement of a single loop cable operating as both the ride cable and the retrieval means as set forth in Claim 36.

#### **Tarasoff**

Tarasoff is directed to an aerial transport system in which the passenger cars (24, 26, and 28) are continuously clamped to the cable 10 during the entire trip. Tarasoff does not describe or suggest the features of the Applicant's claimed amusement ride assembly that are missing from Palumbo and Remington. Moreover, Tarasoff does not describe an amusement ride that provides a free-rolling ride under gravity and associated retrieval means.

The novel configuration of the Applicant's claimed amusement ride enables a lower-cost amusement ride assembly, with lower maintenance requirements because it utilizes only one cable. Additionally, the ability to transport a passenger carrier between end stations via the loop cable provides a number of new possible ride configurations as described and shown in the present specification. Further, the novel use of a **single rotatable endless loop cable** enables the

ride to extend efficiently and safely over large distances, e.g, over 3km, such as over a valley, as is demonstrated by a commercially successful installation of the claimed amusement ride in New Zealand.

For all of the foregoing reasons, it is believed that the Applicant's claimed amusement ride assembly as set forth in Claim 36 is a nonobvious combination that provides a novel thrill ride that is not anticipated or suggested by the proposed combination of Palumbo, Remington, and Tarassoff. Even if the features of the cited references could somehow be combined as suggested by the examiner, the resulting combination would not have all of the structural features and advantages of the Applicant's claimed amusement ride.

Claims 37, 39, 40, 42, 44, 46, 47, 52, 53, 55, 58, and 62 depend from Claim 36 either directly or indirectly and thus, include all of the features of Claim 36. Therefore, Claims 37, 39, 40, 42, 44, 46, 47, 52, 53, 55, 58, and 62 are allowable over the proposed combination of Palumbo, Remington, and Tarassoff for at least the same reasons as Claim 36.

Claims 48, 56, and 57 are independent claims that recite the same features set forth in Claim 36 relative to the loop cable. Therefore, Claims 48, 56, and 57 are allowable over the proposed combination of Palumbo, Remington, and Tarassoff for at least the same reasons as Claim 36.

**35 USC 103(a): Claim 41**

The examiner rejected Claim 41 under 35 USC 103(a) as being unpatentable over Palumbo in combination with Remington and Tarassoff and further in view of US 5,759,107 (Nagel). However, Nagel is cited for describing a gyroscopic amusement ride. The examiner did not indicate that Nagel describes or shows any other feature that is missing from the combination of Palumbo, Remington, or Tarassoff. Therefore, it appears that Nagel does not overcome the deficiencies of the proposed combination of Palumbo, Remington, and Tarassoff as discussed above relative to Claim 36.

Claim 41 depends from Claim 36 and thus, includes all of the features of Claim 36. Therefore, Claim 41 is allowable over the proposed combination of Palumbo, Remington, and Tarassoff, and Nagel for at least the same reasons as Claim 36.

**35 USC 103(a): Claims 59, 60, and 61**

The examiner rejected Claims 59, 60, and 61 under 35 USC 103(a) as being unpatentable over Palumbo in combination with Remington and Tarassoff and further in view of US 3,854,554 (Booker). However, Booker is cited for describing rotatable movement of a carrier controlled by one or more control modules. The examiner did not indicate that Booker describes or shows any other feature that is missing from the combination of Palumbo, Remington, or Tarassoff. Therefore, it appears that Booker does not overcome the deficiencies of the proposed combination of Palumbo, Remington, and Tarassoff as discussed above relative to Claim 36.

Claims 59, 60, and 61 depends from Claim 36 either directly or indirectly and thus, include all of the features of Claim 36. Therefore, Claims 59, 60, and 61 are allowable over the proposed combination of Palumbo, Remington, Tarassoff, and Booker for at least the same reasons as Claim 36.

**CONCLUSION**

In view of the foregoing amendments and remarks, it is believed that the claims of this application are in condition for allowance. The Applicants respectfully request reconsideration of the final rejection in the light of the amendments and remarks presented herein.

Respectfully submitted,

DANN, DORFMAN, HERRELL AND SKILLMAN  
A Professional Corporation  
Attorneys for Applicant

By /Vincent T. Pace/  
Vincent T. Pace  
PTO Registration No. 31,049

Tel.: 215-563-4100  
Fax: 215-563-4044  
e-mail: vpace@ddhs.com